

Unit Classes Standard Values

The PDS4 master schema defines a set of *unit classes* - related units of measure - to be used for defining label attributes in all dictionaries. Following is a list of these unit classes and the standard values allowed for attributes with that unit type. Case, spacing, and abbreviation all count when it comes to matching values.

Acceleration

- cm/s**2
- km/s**2
- m/s**2

Amount of Substance

- mol

Angle

- arcmin
- arcsec
- deg
- hr
- mrad
- rad

Angular Velocity

- deg/day
- deg/s
- rad/s

Area

- m**2

Current

- A
- mA

Frame Rate

- frame/s

Frequency

- Hz

Length

- AU
- Angstrom
- cm
- km
- m
- micrometer
- mm
- nm

Map Scale

- km/pixel
- m/pixel
- mm/pixel
- pixel/deg

Mass

- g
- kg

Miscellaneous Units

- DN
- electron/DN
- pixel

Optical Path Length

- airmass

Pixel Resolution - Angular

- arcsec/pixel
- deg/pixel
- radian/pixel

Pixel Resolution - Linear

- km/pixel
- m/pixel
- mm/pixel

Pixel Scale - Angular

- pixel/arcsec
- pixel/deg
- pixel/radian

Pixel Scale - Linear

- pixel/km
- pixel/m
- pixel/mm

Pressure

- Pa
- bar
- hPa
- mbar

Radiance

- $W \cdot m^{-2} \cdot sr^{-1}$
- $W / (m^2 \cdot sr)$

Rates

- counts/bin
- kilobits/s

Solid Angle

- sr

Spectral Irradiance

- SFU — **NOTE:** Do not use this unit in SBN data
- $W \cdot m^{-2} \cdot Hz^{-1}$
- $W \cdot m^{-2} \cdot nm^{-1}$
- $W \cdot m^{-3}$
- $W / m^2 / Hz$
- $W / m^2 / nm$
- W / m^3
- $\mu W / cm^2 / \mu m$

Spectral Radiance

- $W \cdot m^{-2} \cdot sr^{-1} \cdot Hz^{-1}$

- $\text{W}\cdot\text{m}^{-2}\cdot\text{sr}^{-1}\cdot\text{nm}^{-1}$
- $\text{W}\cdot\text{m}^{-3}\cdot\text{sr}^{-1}$
- $\text{W}/\text{m}^2/\text{sr}/\text{Hz}$
- $\text{W}/\text{m}^2/\text{sr}/\text{nm}$
- $\text{W}/\text{m}^2/\text{sr}/\mu\text{m}$
- $\text{W}/\text{m}^3/\text{sr}$
- $\mu\text{W}/\text{cm}^2/\text{sr}/\mu\text{m}$

Storage

- byte

Temperature

- K
- degC

Time

- day
- hr
- julian day
- microseconds
- min
- ms
- s
- yr

Velocity

- cm/s
- km/s
- m/s

Voltage

- V
- mV

Volume

- L
- m^3

Wavenumber

- 1/cm

- 1/m
- 1/nm
- cm^{**}-1
- m^{**}-1
- nm^{**}-1

As of 2017-01-11, this page has been updated for release 1.7.0.0 of the PDS4 Information Model.